(d) whether Government proposes to install more such solar energy plants, especially in the rural regions, during the current financial year; and

(e) if so, the details thereof?

THE MINISTER OF STATE OF THE MINISTRY OF NEW AND RENEWABLE ENERGY (SHRI VILAS MUTTEMWAR): (a)to (e) The Ministry is promoting deployment of solar photovoltaic power packs/plants in different parts of the country under various programmes including remote village electrification programme by providing partial financial support. These projects are implemented through the State implementing agencies in their respective States. The State-wise details of such projects under implementation, including the projects sanctioned during 2007-08 and the funds released to the State agencies are given in Statement (*See* below). These projects are likely to be completed during 2008-09.

The projects for installation of solar photovoltaic power packs/plants are considered by the Ministry on the basis of proposals submitted by the States, as per provisions of the scheme, and availability of funds.

Statement

State-wise details of solar plants and funds released during 2007-08

State	Type of System	Capacity sanctioned (kWp)	Capacity under implementation (kWp)	Central Financial Assistance (Rs. in Lakhs)
Chhattisgarh	Power Plant	646.8	320.0	1858.00*
Haryana	Power Plant	56.7	56.7	35.43
Jammu & Kashmir	BIPV	10.0	10.0	5.00
	Power Pack	1.0	1.0	0.25
Maharashtra	Power Plant	117.4	97.4	283.00*
	BIPV	8.0	8.0	4.00
	Power Pack	7.0	7.0	3.50
Orissa	Power Plant	113.0	113.0	354.00*
West Bengal	Power Plant	945.0	310.0	1360.00*

BIPV—Building Integrated Photovoltaic Power Plant.

*This includes release of funds to the State agencies for both on-going and completed projects for installation of solar photovoltaic systems/power plants sanctioned under the remote village electrification programme.

Research and development activities

1795. SHRI N.R. GOVINDARAJAR: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) whether there is lack of research and developmental activities in the field of New and Renewable Energy particularly in solar energy, in the country;

(b) if so, the details thereof;

(c) the details of the funds allocated and expenditure incurred on research and development of New and Renewable Energy during the Tenth Five Year Plan;

(d) the details of funds allocated during the Eleventh Five Year Plan; and

(e) the steps taken by Government to promote solar energy in the country during the Eleventh Five Year Plan?

THE MINISTER OF STATE OF THE MINISTRY OF NEW AND RENEWABLE ENERGY (SHRI VILAS MUTTEMWAR): (a) No, Sir. The Ministry of New and Renewable Energy supports Research, Design and Development (RD&D) activities in New and Renewable Energy including solar energy in the country. Comprehensive guidelines for supporting and accelerating pace of Research, Design and Development leading to eventual manufacture and deployment of various Renewable Energy Systems including solar energy have been put in place. In this regard, about 600 RD&D projects have been financially supported in the aforesaid technology areas.

(b) Does not arise.

(c) During the Tenth Five Year Plan period an expenditure of Rs. 72.65 crore has been incurred on research and development in New and Renewable Energy.

(d) An amount of Rs. 600 crore has been tentatively allocated for Research, Design and Development in New and Renewable Energy for the Eleventh Five Year Plan.

(e) The Ministry has launched some new schemes in addition to implementation of ongoing schemes to encourage large scale use of solar energy in the country during the Eleventh Five Year Plan Period. The new schemes include 'Development of Solar Cities' and 'Demonstration programme on MW size Grid Solar Power Generation'. In addition, Research and Development thrust areas for solar and other New and Renewable Energy Technologies for the Eleventh Five year Plan period have also been identified and publicized through newspaper and website advertisements for further intensifying research and technology development in this area. Promotional measures taken by the Government and other associated agencies include publicity and awareness campaigns, amendment of building bye-laws for making the use of solar water heaters mandatory in certain categories of buildings, rebate in property tax/electricity tariff to the users of solar water heaters, etc. In addition, various other types of fiscal and financial incentives are proposed to continue to be provided for promoting the use of various solar energy systems and devices in the country during the Eleventh Plan.

T&D losses of power

1796. SHRI MAHENDRA MOHAN: Will the Minister of POWER be pleased to state:

(a) the estimated loss of electricity on account of theft, free power and cross subsidy;

(b) the estimated rate of Transmission and Distribution (T&D) losses in the country during the last three years, and how it compares with that in other developed countries; and

(c) what has been done to expand and upgrade Transmission and Distribution of electricity?

THE MINISTER OF POWER (SHRI SUSHILKUMAR SHINDE): (a) and (b) In the earlier system of monitoring, utilities used to monitor Transmission and Distribution (T&D) losses. T&D losses were being computed taking into account electricity bills issued to consumers as accrued income and not on actual collection basis. T&D losses for the years 2003-04, 2004-05 and 2005-06 were 32.53%, 31.25% and 30.42% respectively of the total energy available for sale. In that system there was a tendency of utilities booking distribution losses under subsidized/un-metered supply, thereby under reporting the former. The concept of Aggregate